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10/043,403	01/10/2002	Norman Hay	29752/36543B	9366

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EXAMINER

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 01/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

10/043,403

Applicant(s)

HAY ET AL.

Examiner

Akiba K Robinson-Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-42,45,46,48 and 51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36-42,45,46,48 and 51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12, 10, 3. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of Claims***

1. Due to communications filed 11/4/03, the following is a non-final office action. Claims 36-42, 45, 46, 48 and 51 are pending in this application and have been examined on the merits. Claims 36, 38-42, 45, 46, 48 and 51 have been amended. The previous rejection has been withdrawn, and the following reflects the claims as amended.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 36, 40-42, 45, 46, 48, are rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al (5,887,243), and further in view of Reep (6,327,569).

As per claim 36, Harvey et al discloses:

Identifying farms in the region of interest, (Col. 281, lines 3-16, [recorded data of farmer's farm information]);

Determining projected profits to each of the farms in the region of interest for growing products different than the crop of interest based at least partially on the at least one current market price, (Col. 289, lines 65-67, [projected profits]);

Selecting at least one of the products to be replaced by the crop of interest on at least some of the farms in the region of interest, (Col. 281, lines 34-39, [shows farmers are choosing alternative crops]);

Determining profits to be earned by the at least some of the farms for growing the crop of interest, (Col. 288, lines 51-55, [determining what mix of crops are most profitable]); and

Summing the profits to be earned by the farms in the region of interest for growing the crop of interest, (Col. 289, line 67-Col. 290, line 9, [projected profit of total units of oats and wheat]).

Harvey et al fails to disclose the following, however Reep discloses:

Electronically accessing at least one on-line market to ascertain at least one current market price for a t least one product different than the crop of interest, (Col. 8, lines 40-54, [linking to the marketplace via Internet]).

It would have been obvious to one of ordinary skill in the art a the time of the applicant's invention to electronically access at least one on-line market to ascertain at least one current market price for a t least one product different than the crop of interest with the motivation of showing that the evaluation of crops in a harvest environment using precision farming techniques to the market place can be utilized in an environment in which users can easily access globally.

As per claim 40, Harvey et al discloses:

Identifying farms in the region of interest, (Col. 281, lines 3-16, [recorded data of farmer's farm information]);

Determining projected profits to each of the farms in the region of interest for growing products different than the crop of interest based at least partially on the at least one current market price, (Col. 289, lines 65-67, [projected profits]);

Selecting at least one of the products to be replaced by the crop of interest on at least some of the farms in the region of interest, (Col. 281, lines 34-39, [shows farmers are choosing alternative crops]);

Estimating an economic effect that substituting the crop of interest for the at least one of the products will have on at least one of: (a) a transportation market, (b) a commodity market; (c) demand for storage space; (d) land usage; (e) a price of at least one of the at least one of the products; (f) supply of at least one product; (g) demand for at least one input to a farm, (Col. 286, lines 25-27, [demand for at least one input to a farm is represented by the projected price being based on demand]).

Harvey et al fails to disclose the following, however Reep discloses:

Electronically accessing at least one on-line market to ascertain at least one current market price for a t least one product different than the crop of interest, (Col. 8, lines 40-54, [linking to the marketplace via Internet]).

It would have been obvious to one of ordinary skill in the art a the time of the applicant's invention to electronically access at least one on-line market to ascertain at least one current market price for a t least one product different than the crop of interest with the motivation of showing that the evaluation of crops in a harvest environment using precision farming techniques to the market place can be utilized in an environment in which users can easily access globally.

As per claim 41, Harvey et al fails to disclose the following, however Reep discloses:

Taking market action based upon the estimated economic effect, (Abstract, lines 9-18, [transacting a sale through the market]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to take market action based upon the estimated economic effect with the motivation of determining the best time to enter crop value into the marketplace.

As per claim 42, Harvey et al discloses:

Wherein the commodity market is associated with at least one of the at least one of the products to be replaced by the crop of interest, (Col. 286, lines 34-37, [alternate crop]).

As per claim 45, Harvey et al discloses:

Identifying farms in the region of interest, (Col. 281, lines 3-16, [recorded data of farmer's farm information]);

Determining projected profits to each of the farms in the region of interest for growing products different than the crop of interest based at least partially on the at least one current market price, (Col. 289, lines 65-67, [projected profits]);

Selecting at least one of the products to be replaced by the crop of interest on at least some of the farms in the region of interest, (Col. 281, lines 34-39, [shows farmers are choosing alternative crops]);

Harvey et al fails to disclose the following, however Reep discloses:

Electronically accessing at least one on-line market to ascertain at least one current market price for a t least one product different than the crop of interest, (Col. 8, lines 40-54, [linking to the marketplace via Internet]).

Selecting a subset of the identified farms to grow the crop of interest based on the profit that the identified farms can expect to earn by growing the crop which is replaced by the crop of interest and upon at least one risk associated with the geographic location of the identified farms, (Col. 3, lines 25-30 w/ Col. 4, lines 32-46, [location in the agricultural field to enhance future precision farming]).

It would have been obvious to one of ordinary skill in the art a the time of the applicant's invention to combine the teachings of Reep and Deitrich et al with the motivation of showing that the evaluation of crops in a harvest environment using precision farming techniques to the market place can be incorporated into a resource allocation/production planning system since crops in a harvest environment serve as resources and precision farming techniques can be used in production planning in an agricultural environment.

As per claim 46, Harvey et al fails to disclose the following, however Reep discloses:

Wherein the at least one risk comprises at least one of weather risk and logistics risk, (Col. 3, lines 25-30, [where the storage in an elevator step represents logistic risks]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for a risk to comprise at least a logistic risk with the motivation of having the ability to determine and avoid conditions that may offset production.

As per claim 48, Harvey et al fails to disclose the following, however Reep discloses:

Wherein the market action is taken by at least one of an electronic buying agent and an electronic selling agent, (Col. 14, lines 52-61, [computerized crop buying device]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for a risk to have an electronic buying or selling agent with the motivation of making the buying/selling process automated and easier to use.

4. Claims 51, 37, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al (5,887,243).

As per claim 51, Harvey et al discloses:

Identifying farms in the region of interest, (Col. 281, lines 3-16, [recorded data of farmer's farm information]);

Determining a first set of aggregated projected inputs and outputs of the farms in the region of interest for growing products different than the crop of interest, (Col. 292, lines 42-53, ([aggregating information about crop quantity])

Selecting at least one of the products to be replaced by the crop of interest on at least some of the farms in the region of interest, (Col. 281, lines 34-39, [shows farmers are choosing alternative crops]);



Determining a second set of aggregated projected inputs and outputs of farms in the region of interest assuming the at least some of the farms replace the at least one of the products with the crop of interest, (Col. 292, lines 59-65, [aggregation cycle repeated]); and

The following is obvious with Harvey et al because Harvey et al discloses that projected variables are aggregated and continuously refined in order to project optimal planting plans (see Col. 292, line 66-Col. 293, line 8). Refining the aggregated variables represents the computation of a difference between first and second sets of aggregated products because both result in an estimation that will eliminate unwanted data and produce an accurate optimized solution.

Computing a difference between the first and second sets of aggregated inputs and outputs to estimate at least one effect growing the crop of interest will have on the region of interest;

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to compute a difference between the first and second sets of aggregated inputs and outputs to estimate at least one effect growing the crop of interest will have on the region of interest with the motivation of making an estimate that will eliminate unwanted data and produce an accurate optimized solution

As per claim 37, Rawlins discloses:

A profit estimator in communication with the database for estimating a profit that the farmer can expect to earn by growing at least one of the crops which are different

from the crop of interest, (Col. 288, lines 51-55, [which mix of crops are the most profitable]);

A product selector cooperating with the profit estimator to select a crop from the at least one of the crops which are different from the crop of interest, (Col. 281, lines 34-39, [shows farmers are choosing alternate crops]);

A production estimator cooperating with the product selector for estimating a quantity of the crop of interest to be produced by a farmer on acreage associated with the crop selected by the product selector, (Col. 290, lines 1-9, [forty acres of oats, etc.]);

A pricing engine cooperating with the production estimator to develop a price to be offered the farmer of interest to grow the quantity of the crop of interest estimated by the production estimator based at least in part on the profit that the farmer can expect to earn by growing the crop selected by the product selector, (Col. 290, lines 1-9, [projected profits]).

Harvey et al does not specifically use the following language: a profit estimator, a product selector, a production estimator, and a pricing engine..

However, it is obvious to use this type of hardware (a profit estimator, a product selector, a production estimator, and a pricing engine) in order to carry out the processes disclosed above in the claim limitations. Without this type of hardware, the disclosed steps could not be carried out by the Harvey, et al reference.

The following is obvious with Harvey et al since Harvey et al discloses that market price data is part of the national level intermediate generation set which is inputted into the computer (Shown in Col. 286, lines 9-25):

A database containing current market price data for crops, which are different from the crop of interest.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a database containing current market price data for crops with the motivation of having a storage area that is readily accessible if market price data is needed.

As per claim 38, Harvey et al discloses:

Estimating a profit that the farmer can expect to earn by growing at least one of the crops which are different from the crop of interest, (Col. 288, lines 51-55, [which mix of crops are the most profitable]);

Selecting a crop from the at least one of the crops which are different from the crop of interest, (Col. 281, lines 34-39, [shows farmers are choosing alternate crops]);

Estimating a quantity of the crop of interest to be produced by a farmer on acreage associated with the selected crop, (Col. 290, lines 1-9, [forty acres of oats, etc.]);

Developing a price to be offered the farmer of interest to grow the estimated quantity of the crop of interest based at least in part on the profit that the farmer can expect to earn by growing the selected crop which is different than the crop of interest, (Col. 290, lines 1-9, [projected profits]).

The following is obvious with Harvey et al since Harvey et al discloses that market price data is part of the national level intermediate generation set which is inputted into the computer:

Accessing a database containing current market price data for crops which are different from the crop of interest, (Shown in Col. 286, lines 9-25):

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to access a database containing current market price data for crops with the motivation of having a storage area that is readily accessible if market price data is needed.

5. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey et al (US 5,887,243), and further in view of Buman et al (US 6,338,040)

As per claim 39, Harvey et al fails to disclose the following, however Buman et al discloses:

Identifying a risk factor associated with the farmer of interest, (Col. 3, lines 15-20, [non-Bt corn assets]); and

Adjusting the price to be offered the farmer of interest to grow the quantity of the crop of interest based at least in part upon the risk factor, (Col. 3, lines 20-24, [added to the purchase price of the asset]).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the risk factor to adjust the price with the motivation of avoiding taking a chance of developing an unsuccessful asset.

### ***Response to Arguments***

6. As per the office action filed 7/31/03, the finality has been withdrawn.

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7. As per the signed copies of the IDS, these copies are attached to this office action.
8. As per the 35 USC 101 rejection, this rejection has been withdrawn due to the amendment filed 11/4/03.
9. Applicant's arguments with respect to claims 36-42, 45, 46, 48 and 51 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 703-305-1340. The examiner can normally be reached on Monday-Friday, 8:30 am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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A. R. B. 

January 15, 2004

  
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